

Voiding—If there are difficulties with voiding, use clean intermittent catheterisation.

Postoperative use—Semi-rigid prostheses may be used after four weeks. Patients can be taught how to pump up an inflatable prosthesis after four to six weeks.

Postoperative problems

Infection occurs in 1-10% of cases, depending on the difficulty of the procedure. Repeat operations are more prone to infection. It is usually necessary to remove the infected part or complete prosthesis, and, although difficult, it is possible to replace it six months later.

Erosion is usually due to infection or to an unsuspected breach of the urethra at surgery.

Glans ischaemia occurs with vascular compression or damage.

Supersonic transport (SST) deformity (also known as Concorde deformity) with glans droop may be unsightly but may not matter if there is an additional glandular erection.

Mechanical problems are now uncommon. If they occur the part should be replaced.

Prognosis

Penile prostheses give acceptable results. In many large series over 80% of patients and their partners were satisfied with the results. In those with Peyronie's disorder, a prosthesis straightened the penises of 70%. There is no real age limit for the operation, but a prosthesis should not be inserted unless it is going to be used.

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Appearance of a penis after insertion of an inflatable prosthesis, with the device deflated (top) and inflated (left)

The picture of a live sex show is by Axel Kirchhof and reproduced with permission of Action Press and Rex Features.

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Edward Jenner's *Inquiry* after 200 years

Christie's New York sale of the late Haskell Norman's magnificent medical library included a first, second, third, and first American edition of Edward Jenner's famous *Inquiry into the Causes and Effects of the Variolae Vaccinae*. This reminds us that it is 200 years since Jenner published his initial evidence that inoculated cowpox was a safe alternative to inoculated smallpox (variolation) for the prevention of smallpox. The *Inquiry* is regularly included in summaries of the most important medical books and in histories and encyclopaedias of medicine. That it transcends subject boundaries is shown by its inclusion in *Printing and the Mind of Man*, which charts the impact of printing on the evolution of Western civilisation.

Those seeking basic information about what Jenner did, however, might look no further than such summaries, many of which undervalue or exaggerate Jenner's achievement. For example, some, including *Printing and the Mind of Man*, mention the vaccination of only James Phipps in 1796, and ignore the more important series of arm to arm vaccinations done in 1798. Others, including Haskell Norman, confidently assert that Jenner vaccinated 23 people; presumably because he arranged his data as 23 "cases." However, 15 "cases" described circumstantial epidemiological evidence that natural cowpox was safe and prevented smallpox. In fact, the number vaccinated, though small, is unknown because "case 21" comprised one named individual and "several children and adults." Also, some suggested that the immunity to smallpox in all those vaccinated was tested by variolation; in fact, only four were challenged.

Unjustified credit is sometimes given to Jenner for introducing the terms virus (already long used to indicate a transmissible

poison) and vaccination (introduced by his friend Richard Dunning in 1800. Jenner used vaccine as an adjective in 1799; it was used as a noun in mainland Europe by 1800). Jenner is also generally credited with being the first to suggest, in his later monographs, that smallpox could be eradicated. However, in 1793, John Haygarth of Chester had published a plan to "exterminate" smallpox by variolation, isolation, rewards, and punishments. It needed the replacement of variolation by vaccination to make it workable, but important elements of Haygarth's plan were used in the WHO's smallpox eradication campaign.

At the same time, few acknowledge Jenner's important distinction between true cowpox, which conferred immunity to smallpox, and spurious cowpox—for example, other bovine zoonoses, or badly contaminated material—which did not. Without this information the introduction of vaccination would have been considerably delayed.

Jenner's own words still make fascinating reading, and those wishing to try this have various choices. First editions of the *Inquiry* regularly fetch five figure sums (\$32 200 (£20 000) at the Norman sale). Second and third editions fetch four figures, but in fact are more useful because they include Jenner's later monographs of 1799 and 1800. However, don't despair. Many large medical libraries have copies, and William LeFanu's *Bibliography of Jenner* (St Paul's Bibliographies, 1985) lists their availability, as well as various reprints and facsimiles.

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